

Agilent Millipede Probes

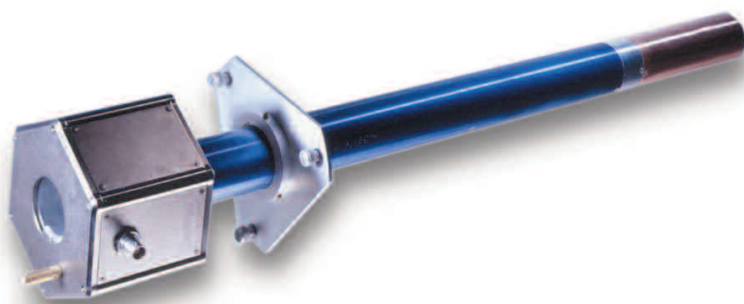
Data Sheet

Introduction

The Agilent Millipede coil allows the use of high-field vertical magnets for imaging. It makes efficient use of space inside the magnet, which is critical for micro-imaging applications, particularly preclinical studies.

Key Benefits

- **Interpret data accurately**—The unique Millipede design reduces the intensity of flip-angle related image artifacts, eliminating error in data interpretation.
- **Get results faster**—Optimized circuit design coupled with quadrature detection yields superior signal-to-noise ratio, reducing the acquisition time.
- **Image a variety of sample sizes**—Improved RF homogeneity allows placing samples closer to the coil edges, enabling imaging of samples as large as rodents in a vertical bore magnet.



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Specifications and Ordering Information

¹H Millipede probe specifications and product numbers are summarized in Table 1. Agilent Technologies also provides a variety of double-tuned Millipede probes upon special request. Contact your local Agilent sales representative for pricing and probe availability.

Table 1
¹H Millipede Probe Specifications and Product Numbers.

| Frequency MHz | Clean id mm | od mm | Pw90** us | S/N* | Part number |
|---------------|-------------|-------|-----------|-------|-------------|
| 300 | 20 | 55 | 35 | 150:1 | S192255100 |
| 300 | 30 | 55 | 50 | 150:1 | S192255500 |
| 300 | 40 | 55 | 100 | 80:1 | S190893500 |
| 400 | 20 | 55 | 35 | 200:1 | S192255200 |
| 400 | 30 | 55 | 50 | 200:1 | S192255600 |
| 400 | 40 | 55 | 100 | 100:1 | S190896200 |
| 500 | 20 | 55 | 35 | 250:1 | S192255300 |
| 500 | 30 | 55 | 50 | 250:1 | S192255700 |
| 500 | 40 | 55 | 100 | 120:1 | S190896500 |
| 600 | 20 | 55 | 35 | 300:1 | S192255400 |
| 600 | 30 | 55 | 50 | 300:1 | S192255800 |
| 600 | 40 | 55 | 100 | 150:1 | S190896800 |

*Signal to noise (S/N) was determined using a polypropylene sphere filled with 0.005 M CuSO₄ aqueous solution. Measurement parameters are 50 mm × 50 mm FOV with 38 mm sphere (40 mm probe), 25 mm sphere (30 mm probe), and 30 mm × 30 mm FOV with 13 mm sphere (20 mm probe).

**Requires system configured with 100 W high band amplifier. Measured with mineral oil sample: 32 mm id (40 mm probe), 24 mm id (30 mm probe), and 16 mm id (20 mm probe).

For all the above probes, the homogenous region is 80% of the coil id.

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Product specifications and descriptions in this document are subject to change without notice.

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